

Transit PPPs International Style

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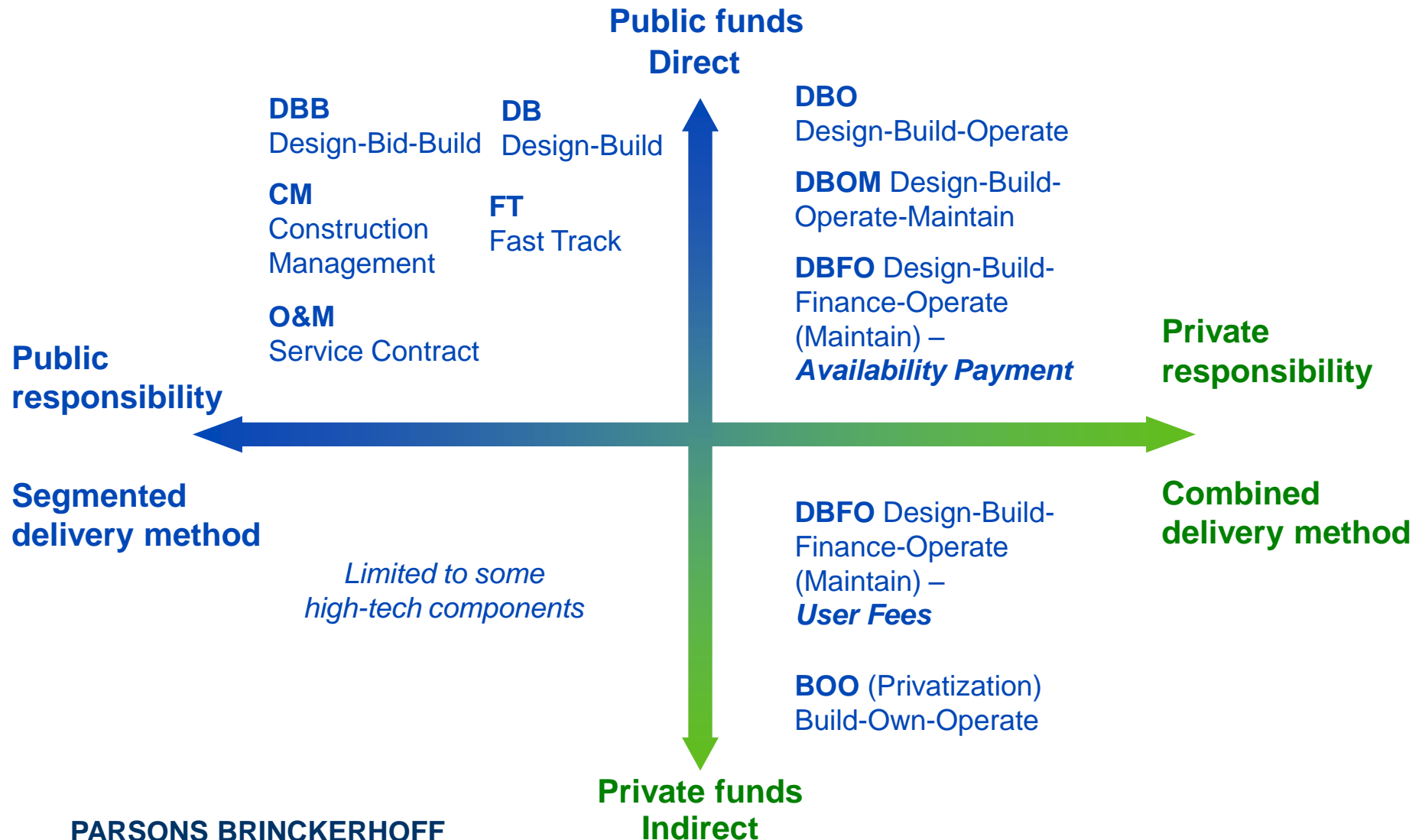
Public and Private Transportation Infrastructure Services are at the Core of PB's Experience



120 years of experience
in infrastructure

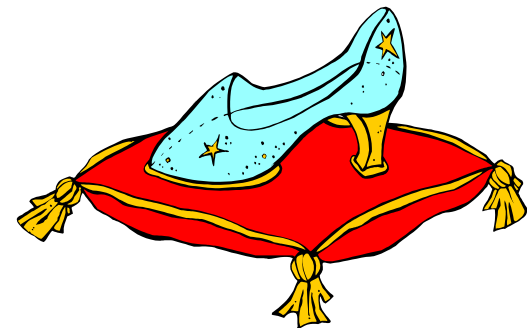


PPP VARIATIONS



Cinderella Asset Class

- **Widening Investment Gap**
 - Needed global infrastructure 2005-2010
 - **Est \$370 billion PER YEAR**
 - Balanced against growing deficits & other demands
- **Investors: Infrastructure New Asset Class**
 - Australian pension funds: Infrastructure now 5%
- **What Do They Like?**
 - High Entry Barriers
 - Inelastic Demand
 - Stable Cash flow
 - Long Duration
- **2002 – 2007 Performance**
 - 124% vs. 96% Equities & 25% Bonds

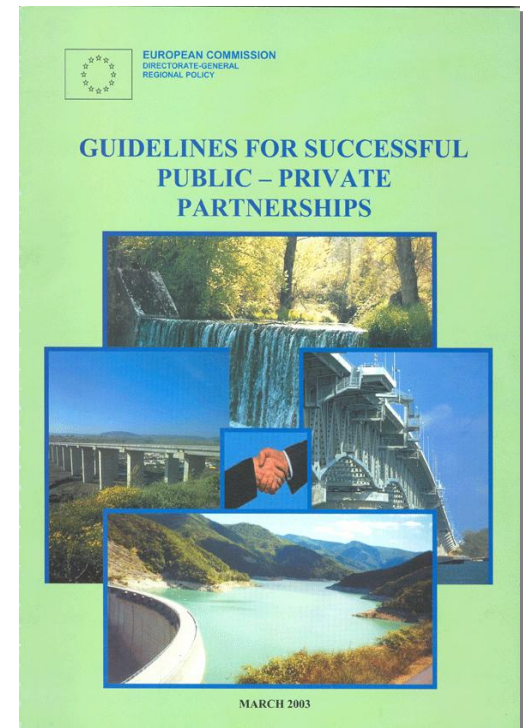


International PPP Frameworks



European View on PPPs

- Just like US – Governments in Europe Struggle with Public Sector Deficits
- PPP Financing Grew By 1/3 2007
- New EU PPP Program
 - Help governments develop PPP projects & meet guidelines for European Investment Bank and other EU entities
- PPPs Estimated to Fund 15% of Infrastructure Projects in Europe



Canada



- Variety of PPP experience
 - Most activity in British Columbia
- Budget 2007 announced new Infrastructure Plan
 - Included \$1.25 Billion new national public-private partnerships fund
 - Merit-based, no allocation by jurisdiction
 - Contribute up to 25% of eligible costs
- Established new federal P3 Office
 - Identify opportunities & execute PPPs at federal level
 - Oversee assessment of PPP options for projects funded from federal infrastructure initiatives



Leveraging Lessons On Transit PPPs



UK: London Docklands Light Rail



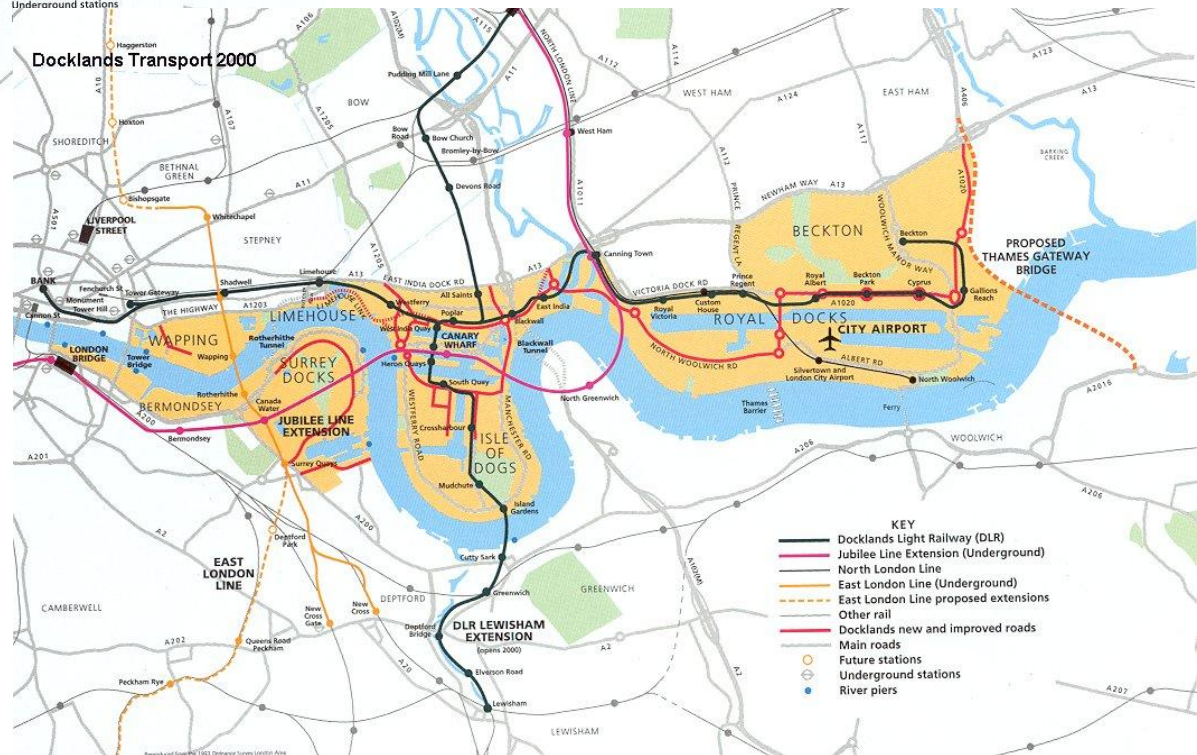
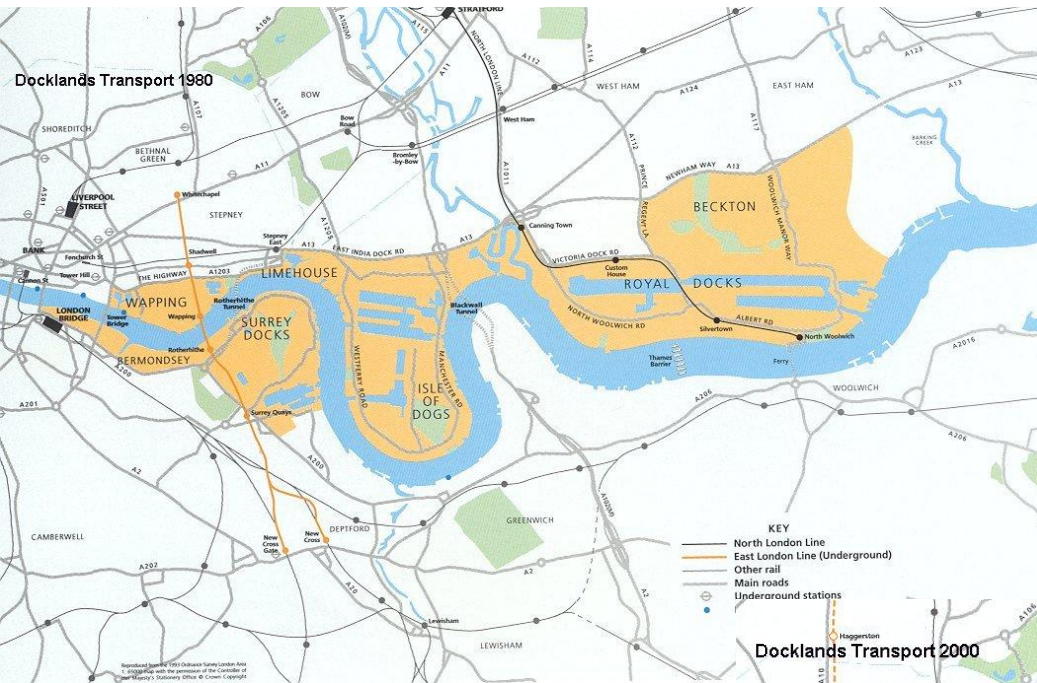
Docklands: First major surface railway built in inner London in 20th century, Opened 8/31/87

- 1991 Transferred to London Docklands Development Corp
- Transit Agency: Transport for London
- Project
 - Original 13 km, 13 stations £77 million
 - 20 years of £1 Billion upgrades & extension
- Central to regeneration of East London
 - Next leading role: key component in UK staging of 2012 Olympic games
- DLR Owns Assets



DOCKLANDS TRANSPORT SYSTEM

1980 VS 2000



UK: London Docklands Light Rail

- Privatized in 1997 - Operate/Maintain Franchise Won by Serco Docklands
 - 5/06 new £400 million franchise for DLR System
- Series of Turnkey Construction Contracts
 - Latest July 2007
 - £67 million Canning Town-Stratford International line
 - To open 2010

Ken Livingstone, Mayor of London:

"This investment will mean better transport links to and from east London, improving services not only for the Olympic and Paralympic Games but for the benefit of Londoners for years to come".

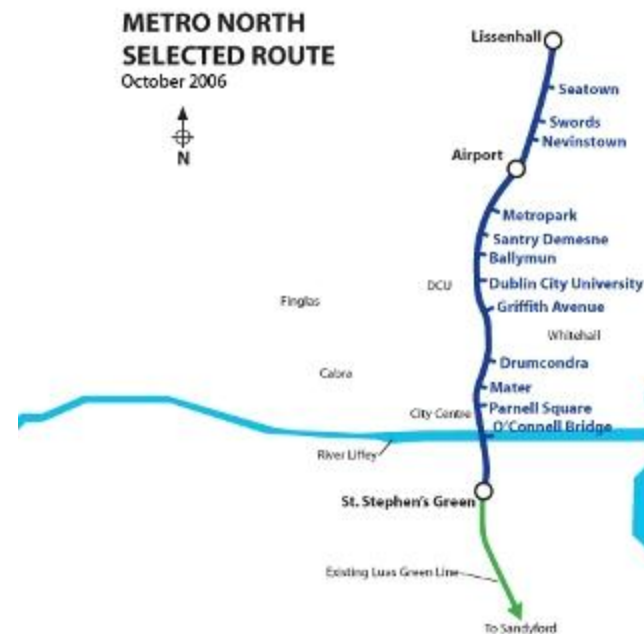


Dublin Metro

- Sponsor: RPA (Railway Procurement Agency)
 - Responsible to provide light rail, metro infrastructure, top quality passenger services.
- Jan 2002 Government RFP mandated to deliver Dublin Metro project as PPP
- Total Metro Project est 1.5 Billion Euro
 - Public Sector Benchmark not public

Initial Metro North Project

- 18 km high Capacity LRT in Tunnels and Elevated Structures
- Link St Stephen's Green to Dublin Airport then Belinstown
- 15 Stations



Dublin Metro

- DBOM/F
- Annual Availability Payments
- 30-Year Term
- Short List – Four consortia, mix of international and Irish Companies

4 Consortia

- (1) Fluor
Siemens
- (2) Barclays
OHL
Mitsui
- (3) HSBC
Meridiam
Acciona
Bouygues
Alstom
- (4) Macquarie
AIB
FCC
Caja Madrid
Bombardier

Metro North Procurement Process



Canada: TransLink

- South Coast British Columbia Transportation Authority (TransLink)
- Plans, Finances Implements and Operates an Integrated Transportation System
 - Public Transit AND Regional Roads
 - As of 2007, TransLink can expand services beyond Metro Vancouver
 - Provide services through contractors and our wholly-owned subsidiaries
 - Coast Mountain Bus Co., BCRTC (SkyTrain) and West Coast Express commuter rail.

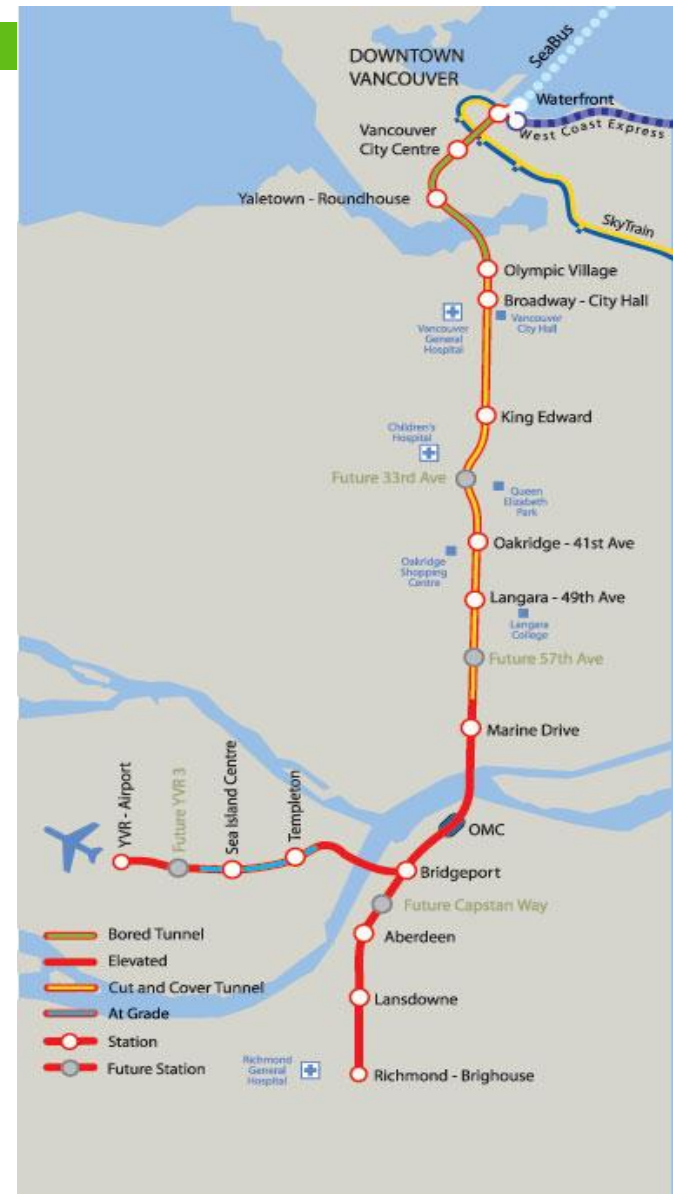


PARSONS BRINCKERHOFF



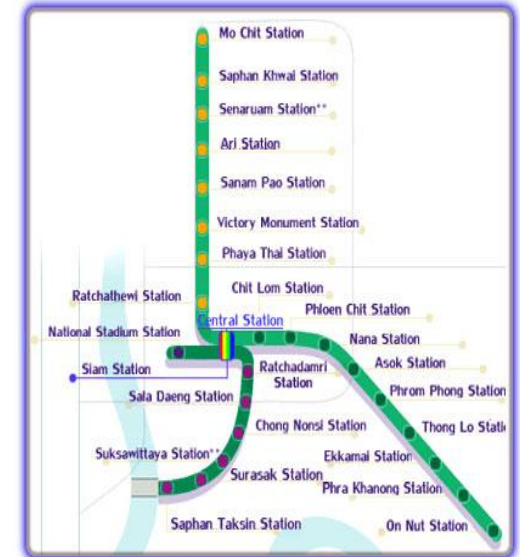
Vancouver RAV

- Sponsoring Agency
 - TransLink, Vancouver, BC/Richmond-Airport-Vancouver Project Management, Ltd. and Greater Vancouver Transportation Authority
- Project: Rapid Transit Line
 - Links Waterfront Station to downtown Vancouver to airport and Richmond city center
- Awarded 2005 CDN \$1.9 Billion
 - InTransit BC Limited Partnership (SNC Lavalin) 35-year Concession DBOM/F
 - Private Debt underwritten by 3 European Banks
- Scheduled to Open 2009



Bangkok Transit System

- Sponsor: Bangkok Municipal Authority (BMA)
- Project: 24 km \$1.5 Billion Bangkok Transit System
- Major Challenge: Overlapping Government Agencies
 - Bangkok: 16 separate agencies for surface and marine transportation
- Multiple Tenders for Transit Projects Failed under Expressway & Rapid Transit Authority
- BMA Successful But Prolonged Development/Construction
 - Awarded 1991 to Bangkok Transit System Company (Tanayong Group, ITD, Siemens)
- Opened for Revenue Service December 1999



Taiwan High Speed Rail

- Sponsor: Bureau of Taiwan High Speed Rail
- Project: 335 km from Taipei City to Kaohsiung City
 - Access to 90% of island
- October 1996 – Announced PPP for HSR via Build-Operate-Transfer
 - Private consortium operate HSR line 35 years then return to government.
- Also: 50 Year Concession on Business Development Around 5 Stations
 - 3,700 acres for station area mixed-use development
- Opened January 2007





Mumbai Metro

- Prime Minister Started June 2006
 - “Set to redefine the lifeline of this metropolis”
 - Total program: 146 km, 3 phases over 15 years, 8 corridors
- Mumbai Metro: Versova-Andheri-Ghatkopar Elevated Mass Rapid Transit System - 11.5 km
 - Reduce trip time from 90 to 21 minutes
- Scheduled for Completion 2009
- BOOT 35-year concession, \$524 million
- Awarded to Reliance Energy, Connexsa, MTR
 - SPV with Mumbai Metropolitan Region Development Authority (74/26)

QUESTIONS & DISCUSSION

